

**GALLAGHER & KENNEDY** **ORIGINAL**  
P.A.  
ATTORNEYS AT LAW

MICHAEL M. GRANT  
DIRECT DIAL: (602) 530-8291  
E-MAIL: MMG@GKNET.COM

RECEIVED

2002 MAR -8 A 11: 07

AZ CORP COMMISSION  
DOCUMENT CONTROL



0000060586

2575 EAST CAMELBACK ROAD  
PHOENIX, ARIZONA 85016-9225  
PHONE: (602) 530-8000  
FAX: (602) 530-8500  
WWW.GKNET.COM

March 8, 2002

Chairman William A. Mundell  
Commissioner Jim Irvin  
Commissioner Marc Spitzer  
Arizona Corporation Commission  
1200 West Washington  
Phoenix, Arizona 85007

Arizona Corporation Commission  
**DOCKETED**

MAR 08 2002

DOCKETED BY	
-------------	--

Re: *La Paz Generating Facility*  
*Docket No. L-00000P-01-0116*

Dear Commissioners:

By this letter, Allegheny Energy Supply responds to the subsidence questions raised in Chairman Mundell's February 15, 2002 letter, which we only recently received. In that letter, Chairman Mundell asked Allegheny to identify "subsidence-related evidence" admitted and/or introduced during the Siting Committee hearings for the La Paz Project. We have outlined below the evidence discussed during the La Paz hearings.

Preliminarily, we have no knowledge of the "crack in the earth east of the Palo Verde Nuclear Generating Station" mentioned in the Interior Department's February 12, 2002 letter to the Chairman. That, of course, would be in an area about 50 miles east of the La Paz Plant and in a completely different aquifer and basin.

Primarily because of subsidence issues raised in the Toltec case, URS, Allegheny's environmental consultant, did conduct a fissure and subsidence investigation of the proposed La Paz plant site. See November 13, 2001 Hearing Transcript, pp. 347-350 and 366-368 (attached as exhibit A). Specifically, URS contacted a number of public agencies for survey data, including the National Geodetic Survey, the Central Arizona Project, the Arizona Department of Transportation, the United States Bureau of Reclamation and the Arizona Department of Water Resources. *Id.* at p. 349. URS also investigated subsidence data from five National Geodetic Survey benchmarks in the Harquahala Basin with data from 1962-1982. Further, URS

Chairman William A. Mundell  
Commissioner Jim Irvin  
Commissioner Marc Spitzer  
March 8, 2002  
Page 2

investigated 44 survey markers along the Central Arizona Project canal with data from 1985-1993. Id. at p. 349.

URS' investigation indicated that "a couple of NGS benchmarks north of the plant showed decreases in elevation that range from only .04 to .16 inches over a period of twenty years, which is really insignificant." Id. (Testimony of Hydrologist David Carr). Further, "most of the CAP markers, interestingly enough, actually show increases in elevation on the order of several, a couple of inches to several fractions of an inch." Id. Put simply, the evidence and investigation demonstrated that there are no subsidence concerns relating to the La Paz Project. None is expected in the future as a result of plant operations. Given the nearby Vidler Recharge facility's activities and Allegheny's recharge/retirement commitment in Condition 3, La Paz Plant water withdrawals will amount to only approximately seven tenths of one percent (.7%) of the aquifer's supply over thirty years.

There is one known fissure in the Harquahala Basin. It is called the "Rogers Fissure." The Rogers Fissure is located five miles southeast of the La Paz plant site and was discovered in 1997 in the aftermath of Hurricane Nora. Because it was discovered at that time, the Rogers Fissure is believed to have opened up as a result of the extreme precipitation from Hurricane Nora. There seems to be no correlation between the Rogers Fissure and any current groundwater pumping in the Harquahala Basin. Id. at pp. 347-348. To document that fact, URS conducted an investigation and inspection of the Rogers Fissure which indicated that there is "no evidence that the fissure had increased in length since 1997." Id. at p. 349. Put another way, the Rogers Fissure has stayed the same since it suddenly opened in 1997.

Finally, as part of its agency investigation, the Arizona Department of Water Resources evaluated Allegheny's and URS' subsidence investigation and information. See November 21, 2001 letter from Joseph C. Smith, Director of the Arizona Department of Water Resources to Ms. Laurie Woodall, Hearing Exhibit A-21 (attached as exhibit B). On the issue of subsidence, ADWR is "satisfied with the investigation performed by the Applicant, however, as suggested to the Applicant at the hearing, the Department believes that a continuing monitoring program should be put in place." Id. at p. 2. As a result of that suggestion, and even though there was no evidence at hearing indicating any active subsidence or fissuring, Allegheny proposed or agreed to Conditions 5 and 23(b) in the Certificate of Environmental Compatibility approved by the Siting Committee. Those conditions establish a subsidence monitoring and reporting protocol. Allegheny also provided testimony indicating that it is company practice to conduct ongoing subsidence monitoring as part of plant operations. See November 13, 2001 Hearing Transcript, pp. 367-368.

Chairman William A. Mundell  
Commissioner Jim Irvin  
Commissioner Marc Spitzer  
March 8, 2002  
Page 3

In conclusion, the Department of the Interior's February 12, 2002 letter does not raise any subsidence issues relating to the La Paz plant site. Also, the record demonstrates that there is no active subsidence in the area of the La Paz plant resulting from or expected as a result of any current or future groundwater withdrawals.

Very truly yours,

**GALLAGHER & KENNEDY, P.A.**



By:  
Michael M. Grant

MMG/bo

ORIGINAL + 10 COPIES  
filed with Docket Control  
this 8th day of March, 2002.

COPIES of the foregoing  
hand-delivered this 8th day  
of March, 2002, to:

Chairman William A. Mundell  
Arizona Corporation Commission  
1200 West Washington  
Phoenix, Arizona 85007

Commissioner Jim Irvin  
Arizona Corporation Commission  
1200 West Washington  
Phoenix, Arizona 85007

Commissioner Marc Spitzer  
Arizona Corporation Commission  
1200 West Washington  
Phoenix, Arizona 85007

Chairman William A. Mundell  
Commissioner Jim Irvin  
Commissioner Marc Spitzer  
March 8, 2002  
Page 4

COPIES of the foregoing mailed  
this 8th day of March, 2002, to:

Laurie Woodall  
Line Siting Committee Chair  
Office of the Attorney General  
1275 West Washington  
Phoenix, Arizona 85007

Jason D. Gellman, Esq.  
Attorney, Legal Division  
Arizona Corporation Commission  
1200 West Washington  
Phoenix, Arizona 85007

Mark R. Wolfe, Esq.  
Adams Broadwell Joseph & Cardozo  
Suite 900  
651 Gateway Boulevard  
South San Francisco, California 94080

James D. Viereggs, Esq.  
Morrison & Hecker, L.L.P.  
Suite 1600  
2800 North Central Avenue  
Phoenix, Arizona 85004-1047

  
997271v2

1 BEFORE THE ARIZONA POWER PLANT AND  
2 TRANSMISSION LINE SITING Committee  
3 IN THE MATTER OF THE APPLICATION OF) CASE No. 116  
4 ALLEGHENY ENERGY SUPPLY COMPANY, )  
5 LLC FOR A CERTIFICATE OF ) DOCKET NO.  
6 ENVIRONMENTAL COMPATIBILITY FOR ) L-00000AA01-0116  
7 CONSTRUCTION OF A 1,080 MW )  
8 (NOMINAL) GENERATING FACILITY IN )  
9 SECTION 35, TOWNSHIP 3 NORTH, RANGE)  
10 11 WEST IN LA PAZ COUNTY, ARIZONA )  
11 AND AN ASSOCIATED TRANSMISSION LINE)  
12 AND SWITCHYARDS BETWEEN AND IN )  
13 SECTION 35, TOWNSHIP 3 NORTH, RANGE)  
14 11 WEST AND SECTIONS 23-26, )  
15 TOWNSHIP 3 NORTH, RANGE 11 WEST )  
16 ALSO IN LA PAZ COUNTY, ARIZONA. )  
17 )

18 At: Phoenix, Arizona

19 Date: November 13, 2001

20 Filed: NOV 21 2001

21 REPORTER'S TRANSCRIPT OF PROCEEDINGS

22 VOLUME II  
23 (Pages 206 through 488)

24 ARIZONA REPORTING SERVICE, INC.  
25 Court Reporting  
Suite Three  
2627 North Third Street  
Phoenix, Arizona 85004-1103

26 By: CECELIA BROOKMAN, RPR  
27 Prepared for: Certified Court Reporter  
28 ALLEGHENY/LA PAZ Certificate No. 50154

29 CERTIFIED COPY  
30 (When in red)

1 where I'm pointing, and the record can reflect that it  
2 occupies about the right of one-fourth of the  
3 cross-section.

4 Q. Mr. Carr, again, it may be easier by  
5 reference to the hard copy, but I believe I'm showing  
6 the five-foot line at the line that would be Township  
7 2 North, Range 10 West, Section 25. Would that be the  
8 edge of the district? It would be a little further  
9 left I believe from where you were pointing.

10 A. Well, if you'll notice the -- actually, the  
11 Harquahala Valley Irrigation District, it's an  
12 irregular boundary. Where this cross-section was run,  
13 it clips a little corner of it right here, and I  
14 overlooked that, you're right. The five-foot line is  
15 in fact a little bit to the northwest of that. Here's  
16 a small segment of the district, but the district  
17 proper is to the southeast.

18 Q. Fine, I appreciate that.

19 Finally, there is a reference in the water  
20 supply report to a fissure, which I believe Mr. Whalen  
21 had asked about. Would you please discuss that issue,  
22 and again, I think you have a slide on that subject.

23 A. Yes, I do.

24 I think the fissure that was referred to is  
25 known as the Rogers earth fissure. It's located about

1 five miles southeast of the plant site. It was  
2 discovered in 1997, after Hurricane Nora passed  
3 through the area, and because it was discovered at  
4 that time, it is believed to have opened up as a  
5 result of that extreme precipitation event.

6 As you may have recalled from previous  
7 discussions of fissuring, a lot of times the fissure  
8 can exist for a while, but it doesn't really open up  
9 until you get a pretty good blast of precipitation.  
10 It's actually maybe eroding out underneath. One good  
11 event and it opens up and you have instant fissure.  
12 It doesn't mean that the fissure formed much that  
13 quickly, it just opened up that quickly. It was  
14 observed to be 4400 feet in length, and it trends from  
15 northwest to southeast.

16 Q. Did URS, after this question was asked in  
17 September, conduct an investigation of the fissure?

18 A. Yes, we did.

19 Q. And what did that show in relation to the  
20 fissure?

21 A. Well, URS staff visited the earth fissure in  
22 October of this year. We walked the length of the  
23 fissure and we took a number of GPS measurements and  
24 photographs. And what we found from that was that the  
25 fissure was still about 4400 feet in length, and up to

1 30 feet in width, at least at the widest portion. And  
2 we saw no evidence that the fissure had increased in  
3 length since 1997.

4 Q. As part of this follow-up, did you also  
5 compile data, generally, for subsidence in the area?

6 A. Yes. We contacted a number of public  
7 agencies for survey data. Those agencies included the  
8 National Geodetic Survey, the Central Arizona Project,  
9 Arizona Department of Transportation, the U.S. Bureau  
10 of Reclamation, and the Department of Water Resources.

11 And we found that there are five NGS  
12 benchmarks in the basin that have data from 1962 to  
13 1982. There are also 44 survey markers along the CAP  
14 canal that have data from 1985 to 1993.

15 And what we found from that was that there  
16 were a couple of NGS benchmarks north of the plant  
17 that showed decreases in elevation that ranged from  
18 only .04 to .16 inches over a period of 20 years,  
19 which is really insignificant.

20 Most of the CAP markers, interestingly  
21 enough, actually show increases in elevation on the  
22 order of several, a couple of inches to several  
23 fractions of an inch. I'm not quite sure how to  
24 explain the increase in elevation, but I think the  
25 important thing to conclude from that is that there



1 certainly doesn't seem to be any active subsidence  
2 going on.

3 Q. And again, just to clarify, the Rogers earth  
4 fissure that you were talking about is about five or  
5 so miles southeast of the plant site?

6 A. Yes, it is.

7 MR. GRANT: Those are all the questions I  
8 have of Mr. Carr.

9 CHMN. WOODALL: I had one, Mr. Carr. Can you  
10 explain to me the relationship between the Harquahala  
11 Valley Irrigation District and the Vidler recharge  
12 facility? Is one owned by --

13 MR. CARR: No.

14 CHMN. WOODALL: Can you explain to me what  
15 the connection is, if any?

16 MR. CARR: I might defer to Kevin for that.

17 MR. GERAGHTY: There is no connection. One  
18 is a private enterprise.

19 CHMN. WOODALL: Mr. Carr, if I can ask a  
20 really basic question. What advantage is there to the  
21 Vidler recharge facility to recharge this water? How  
22 is that funded? How do folks make money? I really  
23 don't know anything about that.

24 MR. CARR: Just based on what I know, is they  
25 have a contract with the Arizona water banking

1 Vidler probably owns 70 percent of the  
2 property in the district right now. So therefore, I  
3 think they've kind of guided us, we own these  
4 properties, you can take these, we also own these ones  
5 in La Paz County that are way away from the active  
6 portions, where a lot of the wells the farmers and  
7 things like that are using. So just to kind of speak  
8 to is Vidler aware of Allegheny and what we're doing,  
9 yes, we bought the property; yes, they told us you  
10 don't want to get into that mess PG&E got into. Get  
11 as far away as you can from the district.

12 Q. That is kind of the line of questioning I was  
13 heading toward.

14 Let's move to another part and the Rogers  
15 fault. And I'm more interested not in the Rogers  
16 fault, but the entire area of subsidence. Was there a  
17 survey done of possible subsidence in the surrounding  
18 area?

19 A. (BY MR. CARR) Our survey was, as I testified  
20 to earlier, we compiled available survey elevation  
21 data from various agencies with the historical  
22 markers, and we basically concluded that there was  
23 just very little evidence of any subsidence ongoing in  
24 the basin.

25 Certainly, when you compare this to other

1 areas that this Committee has looked at, it's  
2 insignificant.

3 Q. Do your monitor wells -- are they GPS?

4 A. (BY MR. CARR) The two monitor wells on-site,  
5 are they located by GPS?

6 Q. Yes.

7 A. (BY MR. CARR) I don't know.

8 Q. I was wondering if you plan to have ongoing  
9 monitoring that would include subsidence monitoring at  
10 your own well sites.

11 A. (BY MR. CARR) It looks to me as if based on  
12 our predicted water level drawdowns under a worst-case  
13 scenario, that it hardly seems warranted. Even 30  
14 feet under worst-case, any subsidence that would be  
15 induced by that would be insignificant.

16 Now, certainly, this is an issue that I know  
17 Allegheny would want to look at in relation to their  
18 geotechnical investigation that they do as they  
19 proceed with the power plant. But in terms of being  
20 an issue that I know it has been for other  
21 proceedings, I don't think it would be necessary.

22 A. (BY MR. GERAGHTY) I can speak to on that,  
23 it's kind of a long general project development.  
24 There are benchmarks that you set up associated with a  
25 facility that you do dial into, and I can tell you a

1 standard with Allegheny is that yes, you're going to  
2 check those.

3 Now, quite honestly you're mostly looking for  
4 foundation settlements, issues like that, mostly  
5 associated with your turbines, large tanks  
6 foundations, things like that. Anything large you  
7 build is going to settle, and you always kind of want  
8 to monitor how much it does. But specifically where  
9 the monitoring well's dialed in, I doubt it. There  
10 will be benchmarks associated with the plant that will  
11 be.

12 Q. Actually with my experience with the CAP, if  
13 you're near and using their benchmarks at the canal,  
14 those are the most thorough benchmarks around right  
15 now.

16 A. (BY MR. CARR) Agreed.

17 Q. A little bit more on the monitoring of the  
18 wells. Being in an INA, Mr. Carr, can you tell the  
19 Committee where your well pumping reports will be  
20 filed, or if they have to be filed?

21 A. (BY MR. CARR) Being in an INA, groundwater  
22 pumpage have to be metered, recorded, and reported  
23 annually to DWR.

24 Q. I notice that there's a proposed land  
25 exchange with BLM associated with the well field site.

RECEIVED

ARIZONA DEPARTMENT OF WATER RESOURCES

500 North Third Street, Phoenix, Arizona 85004

Telephone 602-417-2410

Fax 602-417-2415

2001 NOV 27 A 7 58

AZ CORP COMMISSION  
DOCUMENT CONTROL

November 21, 2001



JANE DEE HULL  
Governor

JOSEPH C. SMITH  
Director

Ms. Laurie Woodall  
Chairman, Siting Committee  
Office of the Attorney General  
1275 West Washington  
Phoenix, Arizona 85007

Re: Allegheny's Application for CEC, Docket #116 L-000000AA-01-0116

Dear Madam Chairman:

During the Hearing on November 14, 2001, you requested, on behalf of the Siting Committee, as to whether the Arizona Department of Water Resources (Department) has available staff and is willing to commit such staff to work on three issues with the applicant in Docket #116. The Department does not believe that this is necessary. Each issue is discussed below.

Issue #1 - Should the Applicant be required to work with the Department to perform an aquifer pump test near the site of the proposed wellfield to prove the accuracy of the model provided by Vidler Recharge? Intervenor AZURE and Committee Member Williamson proposed this question.

As stated in the November 9, 2001 Preliminary Hydrologic Review prepared by Dale Mason, Modeling Section Manager, Arizona Department of Water Resources, the Department stands by its position that the model used in this case is valid. "The numerical model was reviewed by the ADWR staff in 1999 and found to reasonably simulate the response of the regional aquifer to historic pumping stresses from 1950 to the present." (Page 3). Despite testimony of AZURE's expert witness, a well formulated and calibrated model is a good tool for predicting the behavior of particular pumping patterns or recharge activity.

Should Committee Member Williamson or any other Member of the Committee wish, the Department would be willing to conduct a generic briefing for the Committee on modeling parameters. The particulars would be from a different part of the State but would demonstrate modeling technology. The Department models many areas of the State, and is considered by most State agencies to be an expert in hydrology and modeling. I would hope that Committee Members would give deference to the Department in these matters.

Ms. Laurie Woodall  
November 21, 2001  
Page Two

Issue #2. Should subsidence monitoring be required in the area of the proposed plant and well-field? Several Committee Members and Intervenor AZURE suggested this. In the November 9, 2001 memo from Dale Mason, the Department suggested that additional subsidence investigations be performed. Applicant testified that it performed an investigation and concluded that subsidence does not exist today in the area of the proposed plant and wellfield.

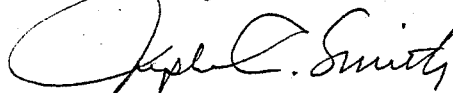
We are satisfied with the investigation performed by the Applicant, however, as suggested to the Applicant at the hearing, the Department believes that a continuing monitoring program should be put in place. The Department believes this could be as simple as requiring a periodic check (i.e. five-years) of monuments and discussions with agencies with infrastructure or jurisdiction near the plant site, such as the Central Arizona Project, the Bureau of Land Management and State Lands. This information could then be conveyed to the Department and the Commission for review. Should the Applicant not prepare a condition to monitor for subsidence, the Department will be prepared to offer a condition to effect such a monitoring program.

Issue #3. Should the Applicant be required to provide mitigation for any damage that may be caused by groundwater pumping over the life of the plant? Committee Member Palmer and I suggested this, along with Intervenor AZURE.

While the Department will not commit staff to negotiate with the Applicant at this time for an agreed upon mitigation plan, the Department may be prepared at the next hearing to propose a condition for mitigation recharge. Of course, if the Applicant proposes mitigation recharge during its rebuttal case, this may not be necessary.

When the transcript is available we will review for further insight into the discussion on these issues and any other issues, which the Committee wishes to be discussed between the Department and the Applicant.

Sincerely,

A handwritten signature in cursive script, appearing to read "Joseph C. Smith".

Joseph C. Smith  
Director

JCS:kd